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EXAMINER
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SHIFERAW, ELENI A

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/891,416

Applicant(s)

SHIN ET AL.

Examiner

Eleni A Shiferaw

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. Claims 1-18 are presented for examination.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bush (Pub. No.: U.S. 2002/0002675 A1) in view of Himmel et al. (Himmel, Patent No.: US 6,622,015 B1), and in further view of Wright et al. (Wright, Patent No.: 6,084,969)

3.1 As per claim 1, Bush teaches a method of applying locking function to an electronic document on the Internet through a locking management server having a locked document storage means in which a locked document comprised of locking function selection region, a locking condition region, a locking guide message region, a hierarchy information region and an electronic document region, is stored, and a plain document storage means in which a plain electronic document is stored, comprising the steps of:

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(1) preparing an electronic document (Bush page 3 par. 0041, page 1 par. 0011; preparing an encrypted electronic document or data packet); and

(2) reading the electronic document (Bush page 4 par. 0045, and 0051; decrypting encrypted electronic document or data packet), wherein the step (1) comprises:

preparing an electronic document (Bush page 3 par. 0041, page 1 par. 0011; preparing an encrypted electronic document or data packet) and storing hierarchy information (Bush page 4 par. 0054, page 5 par. 0059; encrypted data packet information);

determining whether locking function is applied to the electronic document or not (Bush page 4 par 0043-44; Bush teaches determining the entire data packet has been encrypted or not. It would have been obvious to one having ordinary skill in the art at the time of the invention to determine whether locking function (encryption function) is applied to the electronic document or not);

enabling a locking condition (Bush page 4 par. 0054, decryption occurs when encrypting condition is satisfied or when the password or biometric data entered and match with the predetermined saved data) and a locking guide message to be input if the locking function is selected (Bush page 4 par. 0053; data packets instructions);

storing the electronic document in the locking document storage means (Bush page 5 par. 0059; the encrypted confidential information are stored in a storage device); and

if not selected, the step (2) comprises:

determining whether the electronic document to be read by the reader is locked or not (Bush page 4 par. 0043-0045, and page 4 par. 0052),

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enabling to input the locking condition if locked (Bush page 4 par. 0045, and 0054; inputting password to decrypt if encrypted),

allowing the reader to read the locked document if the locking condition is satisfied (Bush page 4 par. 0057, and page. 4 par. 0051, page 5 par. 0057-0058; decrypting the document if authentication is satisfied); and

displaying the locking guide message if the locking condition is not satisfied (Bush page 5 par. 0057, page 4 par. 0053; customer transaction over the internet displayed, it is obvious to display the locking guide like please wait or opening page).

Bush does not explicitly teach storing the electronic document in the plain document storage means, and

transmitting the electronic document to be read,

However Himmel teaches storing the electronic document in the plain document storage means (Himmel Col. 6 lines 1-6), and the step (2) comprises:

transmitting the electronic document to be read (Himmel Col. 6 lines 28-44)

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Himmel with in the system of Bush because it would be convenient to incorporate electronic document technology in a single electronic device, and it would also be advantageous to have a improved method and apparatus for using

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electronic documents within a smart phone since the public already uses personal phones ubiquitously (Himmel Col. 2 lines 31-39).

Bush and Himmel do not explicitly teach about selecting locking function,

However Wright teaches encrypting text messages capable of being transmitted over a pager network, which can be provided as an option to the services provided by the pager network, and which can be centrally managed using a proxy server connected to the network to provide the encryption services to subscribers who select the encryption option (Wright page 4 par. 42-48);

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Wright with in the system of Bush, and Himmel because it would help users to choose from encryption option to encrypt electronic document by apply locking function. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to transmit electronic document to storage or read if selected or not.

3.2 As per claim 2, it has similar limitations as claim 1; therefore, it is being rejected under the same rationale. In addition Bush teaches the method, further comprising the step of transmitting the electronic document from the locking management server to one or more destination servers (Bush page 4 par. 0044), wherein the transmission is performed by

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determining whether the electronic document stored is locked or not (Bush page 4 par. 0043-0045, and par. 0052), if locked (Bush page 4 par. 0044, Abstract), determining whether the destination server has a capability of providing locking function or not (Bush page 4 par. 0045-0048), if the destination server has a capability of providing locking function, transmitting the locked document from its locked document storage means to a locked document storage means of the destination server (Bush page 3 par. 0041, page 4 par. 0045), and if the destination server does not have a capability of providing locking function, keeping storing the locked document in its locked document storage means and transmitting the site address of the locking management server to the destination server (Bush page 5 par. 0039).

3.3 As per claim 5, Bush, Himmel, and Wright teach all the subject matter as described above. In addition Bush teaches the method, wherein the electronic document is selected from the group consisting of e-mail and message posted up on a bulletin (Bush Page 3 par. 0037, and par. 0041; Bush teaches encrypting data packet and transmitting encrypted data packet over a network, it is obvious to have an electronic document is selected from the group consisting of e-mail and message posted up on a bulletin at the time of the invention).

3.4 As per claim 6, Bush, Himmel, and Wright teach all the subject matter as described above. In addition Bush teaches the method, wherein a reply from a certain reader to the message posted up on a bulletin is posted up in the order of hierarchy information stored in the hierarchy information region (Bush page 4 par. 0054).

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4. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bush (Pub. No.: U.S. 2002/0002675 A1) in view of Carey et al. (Carey, Patent No.: US 6,714,793 B1).

4.1 As per claim 7, Bush teaches a locked document including an electronic document transmitted through the network (Bush page 3 par. 0041; encrypted data packet document reads on locked document), comprising;

a) a locking function selection region storing the information whether locking function is applied to the attached electronic document (Bush page 4 par. 0053, page 2 par 0027);

b) a locking condition region storing one or more conditions for locking the attached electronic document (Bush page 4 par 0054);

c) a locking guide message region storing a guide message presented when the locking condition specified is not satisfied (Bush page 4 par. 0043, and page 4 par. 0053)

d) a hierarchy information region storing hierarchy information (Bush page 4 par. 0054-0055, page 5 par. 0059); and

e) a document region storing the document to be transmitted (Bush page 4 par. 0043);

Bush and Himmel do not explicitly teach text message,

However Carey teaches creating a text message and transmitting a text message using a mobile device (Carey col. 8 lines 41-60).



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Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Carey with in the system of Bush because it would be advantageous to communicate via text messages, which are far less costly than voice communications because text message data uses up much less bandwidth or resources than voice data (Carey col. 1 lines 46-57).

4.2 As per claim 8, Bush, and Carey teach all the subject matter as described above. In addition Bush teaches the locked document, wherein the locked document is selected from the group consisting of e-mail, message posted up on a bulletin and text message transmitted though mobile phone (Bush Page 3 par. 0037, and par. 0041; Bush teaches encrypting data packet and transmitting encrypted data packet over a network, it is obvious to have an electronic document is selected from the group consisting of e-mail and message posted up on a bulletin at the time of the invention).

5. Claims 10-15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bush (Pub. No.: U.S. 2002/0002675 A1) in view of Carey et al. (Carey, Patent No.: US 6,714,793 B1), and in further view of Wright et al. (Wright, Patent No.: 6,084,969).

5.1 As per claim 10, Bush teaches a method of applying locking function to a message transmitted and/or received between mobile phones connected by a mobile communication network (Bush Page 1 par. 0012-13; locking function reads on an encrypting data packet), the method comprising the steps of:

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a message preparing step of configuring a transmitter's mobile phone of the mobile phones (Bush Abstract) and inputs locking condition information on the selected locking function (Bush page 4 par. 0054; predetermined password), and attaching locking functions indicating information and the locking condition information to the message (Bush page 4 par 0043, and 0053);

a message transmitting step of transmitting the message prepared in the message preparing step to a receiver's mobile phone via the mobile communication network (Bush page 4 par. 0044, Abstract); and

a message reading step of checking whether the message has the locking function set thereto if the message received in the receiver's mobile phone is intended to read (Bush page 4 par. 0043-0044, and par. 0052), receiving the locking condition information on the locking function or determining locking condition information if the locking function is set to the message (Bush par. 4 page 0052-0054), and displaying the message on the screen of the receiver's mobile phone only when the locking condition information is identical with that attached to the message (Bush page 5 par. 0057-0058, page 4 par. 0051, and Fig. 5 No. 514)

Bush do not explicitly teach the a text message; and

However Carey teaches creating a text message and transmitting a text message in a network using a mobile device (Carey col. 8 lines 41-60).

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Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Carey with in the system of Bush because it would be advantageous to communicate via text messages, which are far less costly than voice communications because text message data uses up much less bandwidth or resources than voice data (Carey col. 1 lines 46-57).

Bush and Carey do not explicitly teach a user who intends to transmit the message selects a desired locking function among one or more locking functions,

However Wright teaches encrypting text messages capable of being transmitted over a pager network, which can be provided as an option to the services provided by the pager network, and which can be centrally managed using a proxy server connected to the network to provide the encryption services to subscribers who select the encryption option (Wright page 4 par. 42-48);

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Wright with in the system of Bush, and Carey because it would help users to choose from encryption option to encrypt messages by apply locking function.

5.2 As per claim 11, Bush, Carey, and Wright teach all the subject matter as described above.

In addition, Carey teaches the method, wherein the message preparing step and the message

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reading step are performed by a text message management program loaded on the mobile phones (Carey col. 8 lines 41-60) The rationale for combining are the same as claim 10 above.

5.3 As per claim 12, Bush, Carey, and Wright teach all the subject matter as described above.

In addition, Bush teaches the method, wherein a data region for setting the locking function includes a locking condition region in which the locking condition information on the locking function is stored (Bush page 4 par. 0043, and 0053), a guide message region in which a guide message to be displayed when a trial of reading the text message is not successful, is stored (Bush page 5 par. 0057-0058), and a hierarchy information region in which the name of a user who read the text message is stored (Bush page 4 par. 0054).

5.4 As per claim 13, Bush, Carey, and Wright teach all the subject matter as described above.

In addition, Bush teaches the method, wherein the message preparing step includes:

storing drafter's name of the text message in the hierarchy information region (Bush page 4 par. 0054);

processing the locking condition information corresponding to the selected locking functions to be input (Bush page 4 par. 0054), and storing the input locking condition information in the locking condition region (Bush page 4 par. 0054); and

causing a guide message to be displayed when the text message cannot be read due to the locking function set thereto, to be input, and storing the input guide message in the guide message region (Bush page 4 par. 0053, page 5 par. 57-58),

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Wright teaches supplying one or more text message locking functions to cause the drafter to select the same (Wright col. 4 lines 42-59);

processing the text message as a plain text message if no locking function is selected by the drafter, or storing the locking function indicating information in the locking function selection region if one or more locking functions are selected by the drafter (Wright col. 10 lines 1-15, and col. 4 lines 42-59);

selecting one or more locking function (Wright col. 4 lines 42-59) The rationale for combining are the same as claim 10 above.

5.5 As per claim 14, Bush, Carey, and Wright teach all the subject matter as described above.

In addition, Bush teaches the method, wherein the message reading step includes:

checking whether there is a locking selection region attached to the text message to determine whether locking function is set to the text message if there is a trial of reading the text message (Bush page 4 par. 0046);

performing a reading step of a plain text message if it is determined that no locking function is set to the text message, or causing the locking condition information on the locking function or determining locking condition information if the locking function is set to the text message (Bush page 4 par. 0054);

checking whether the determined locking condition information is identical with that stored in the locking condition region attached to the text message (Bush page 4 par. 0048);

processing the text message to be read if the two pieces of locking condition information are identical (Bush page 4 par. 0045, and par. 0051); and

processing the text message not to be read if the two pieces of locking condition information are not identical with each other (Bush page 4 par. 0049-0051), and displaying the guide message stored in the guide message region (Bush page 5 par. 57-58).

5.6 As per claim 15, Bush, Carey, and Wright teach all the subject matter as described above. In addition, Carry teaches the method, wherein, if the text message is normally read and a reply text message is prepared, the message reading step further includes the step of adding identification information of a drafter who has prepared the reply text message, including drafter's name and ID, to the hierarchy information region attached to the text message (Carey page 3 lines 50-67) The rational for combining are the same as claim 10 above.

5.7 As per claim 18, Bush, Carey, and Wright teach all the subject matter as described above. In addition, Bush teaches the method, wherein the locking function is to specify the identifier of a specified reader who can read the text message, including name, ID and address, and the locking condition information is the reader's identifier (Bush page 4 par. 0055).

6. Claims 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bush (Pub. No.: U.S. 2002/0002675 A1) in view of Himmel et al. (Himmel, Patent No.: US 6,622,015 B1) and Wright et al. (Wright, Patent No.: 6,084,969), and in further view of Fawcett (Patent Number: 5,768,526).

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6.1 As per claim 3, and 4, Bush, Himmel, and Wright teach all the subject matter as described above.

Bush, Himmel, and Wright do not explicitly teach an electronic document is selected from the group consisting of the date on which the attached electronic document can be open, the specified reader, questions for quiz and combinations thereof.

However Fawcett teaches the method, wherein the condition for locking an electronic document is selected from the group consisting of the date on which the attached electronic document can be open, the specified reader, questions for quiz and combinations thereof (Fawcett col. 4 lines 1-11),

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Fawcett with in the combination system of Bush, Himmel, and Wright because it would validate time and date (Fawcett col. 5 lines 27-34). If the time and date stamp varies from the actual time and date as kept by the receiving component by more than a predetermined amount of time (such as one minute), then the application protocol data unit is discarded. Therefor it would be obvious to use the teachings of Fawcett in the combination system because it would allow validating date and time to the specified reader, questions for quiz and combinations thereof.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bush (Pub. No.: U.S. 2002/0002675 A1) in view of Carey et al. (Carey, Patent No.: US 6,714,793 B1), and in further view of Fawcett (Patent Number: 5,768,526).

7.1 As per claim 9, Bush, and Carey teach all the subject matter as described above.

Bush and Carey do not explicitly teach locking a document is selected from the group consisting of the date on which the attached document can be open, the specified reader, questions for quiz and combinations thereof,

However Fawcett teaches the locked document, wherein the condition for locking a document is selected from the group consisting of the date on which the attached document can be open, the specified reader, questions for quiz and combinations thereof (Fawcett col. 5 lines 27-34),

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Fawcett with in the combination system of Bush and Carey because it would validate time and date (Fawcett col. 5 lines 27-34). If the time and date stamp varies from the actual time and date as kept by the receiving component by more than a predetermined amount of time (such as one minute), then the application protocol data unit is discarded. Therefor it would be obvious to use the teachings of Fawcett in the combination system because it would allow validating date and time to the specified reader, questions for quiz and combinations thereof.

8. Claims 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bush (Pub. No.: U.S. 2002/0002675 A1) in view of Carey et al. (Carey, Patent No.: US 6,714,793 B1), and Wright et al. (Wright, Patent No.: 6,084,969), and in further view of Fawcett (Patent Number: 5,768,526).



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8.1 As per claim 16, Bush, Carey, and Wright teach all the subject matter as described above.

Bush, Carey, and Wright do not explicitly teach date of the text message, including year, month, date, minute and second, and the locking condition information is the reading commencement date,

However Fawcett teaches the method, wherein the locking function is to specify a reading commencement date of the text message, including year, month, date, minute and second, and the locking condition information is the reading commencement date (Fawcett col. 5 lines 27-34).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Fawcett in the combination of Bush, Carey, and Wright because it would validate time and date (Fawcett col. 5 lines 27-34). If the time and date stamp varies from the actual time and date as kept by the receiving component by more than a predetermined amount of time (such as one minute), then the application protocol data unit is discarded. Therefore it would be obvious to use the teachings of Fawcett in the combination system because it would allow validating date and time to the specified reader, questions for quiz and combinations thereof.

8.2 As per claim 17, Bush, Carey, and Wright teach all the subject matter as described above.

In addition, Fawcett teaches the method, wherein the message reading step includes further displaying a remaining time until the reading allowable time limit is reached together with the displayed guide message if the current date determined by the mobile phone itself is not identical

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with the reading commencement date attached to the text message (Fawcett col. 5 lines 27-34)


The rationale for combining are the same as claim 3 above.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eleni A Shiferaw whose telephone number is 703-305-0326. The examiner can normally be reached on Mon-Fri 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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